AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

What is claimed is:

1. An image forming apparatus comprising:

    a plurality of print heads arranged in a row;

    first skew correcting means which correct image data on a line basis in a sub-scanning direction based on the amount of relative inclination between the print heads; and

    second skew correcting means which correct the image data corrected by the first correcting means on a unit basis smaller than one line.

2. The apparatus according to claim 1, wherein the first skew correcting means perform the correction in an image memory and second skew correcting means perform the correction in a FIFO memory.

3. The apparatus according to claim 1, wherein the first skew correcting means perform the correction in an image memory and second skew correcting means perform the correction in a print head portion.

4.   The apparatus according to claim 1, wherein the amount of inclination is detected as an integral multiple of a unit for correction in the correction performed by the second correcting means on a unit basis smaller than one line.

5.   An image forming apparatus comprising:

a plurality of print heads arranged in a row;

a bit map memory;

a read address generator which sequentially generates read addresses from a leading address in the image data region of he bitmap memory;

a write address generator for generating, from the read addresses, write addresses by correcting relative inclination between the print heads on a line basis; and

a memory controller which writes image data to an image data region of the bitmap memory, wherein the leading and rear end portions of the image data region provide respective blank regions, reads from the read addresses generated by the read address generator, image data stored in the image region and writes the image data at the write addresses generated by the write address generator.

6.   The apparatus according to claim 5, wherein the dimensions of the blank regions is equal to or larger than the maximum amount of inclination to be corrected.

7.   An image forming apparatus comprising:

a bitmap memory having an image data region for storing image data and specified blank regions provided on leading and rear end portions of the image data region;

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a read address generating unit for generating read addresses for image data based on correction data on relative inclination between the print heads; and

an output unit for reading the image data from the generated read addresses.

8. An image forming apparatus comprising:

a plurality of print heads arranged in a row;

a bitmap memory for storing image data;

a read address generator for consecutively generating read addresses for image data based on relative inclination between the print heads on the unit basis of one burst access; and

a memory controller for reading the image data from the bitmap memory at the read addresses generated by the read address generator.

9. The apparatus according to claim 8, further comprising storing means for temporarily storing the read image data, the storing means having a capacity of at least one line of data, wherein the memory controller comprises a selecting unit for selectively outputting either of the image data read from the bitmap memory and the image data stored in the storing means based on the relative inclination between the print heads.

10. The apparatus according to claim 8, further comprising storing means for temporarily storing the read image data, the storing means having a capacity of at least one line of data and storing, of the data read by a burst access from the addresses generated by the read address generating unit, data of the length of a specified unit for correction.

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11.   A data processing apparatus comprising:

a memory which stores image data;

first <u>skew</u> correcting means which correct image data on a line basis; and

second <u>skew</u> correcting means which correct the image data corrected by the first

correcting means on a unit basis smaller than one line.

12.   The apparatus according to claim 11, wherein said first <u>skew</u> correcting means

includes a read address generator which sequentially generates read addresses from a leading

address in the image data region of a bitmap memory, a write address generator for generating,

from the read addresses, write addresses by correcting relative inclination on a line basis and a

memory controller which writes image data to an image data region of the bitmap memory,

wherein the leading and rear end portions of the image data region provide respective blank

regions, reads from the read addresses generated by the read address generator, image data stored

in the image region and writes the image data at the write addresses generated by the write

address generator.